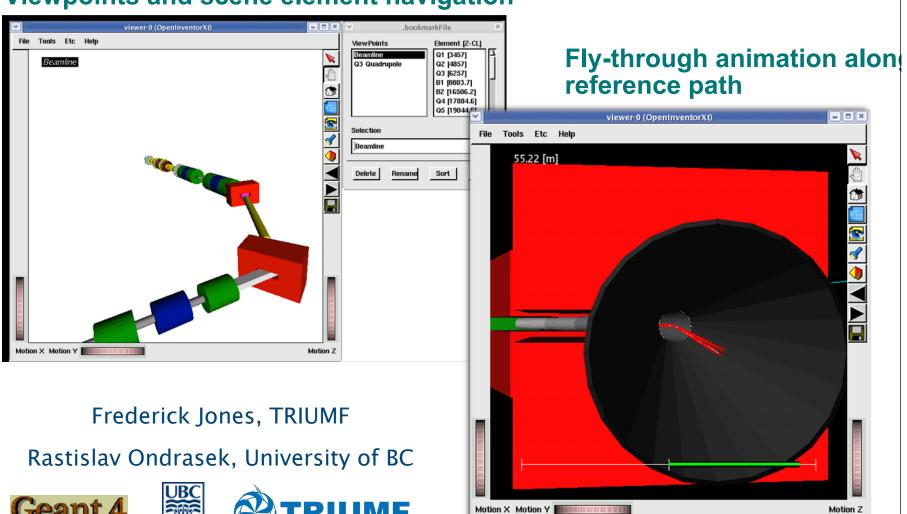


Enhanced Open Inventor Viewer for Interactive Scene Navigation in Geant4

Viewpoints and scene element navigation







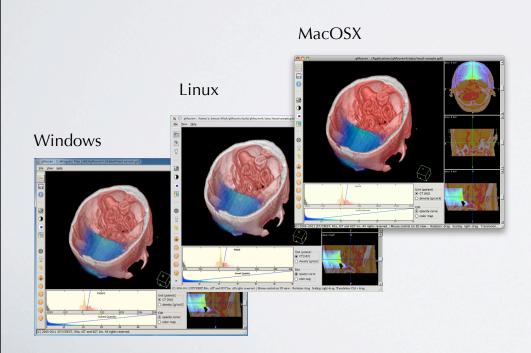


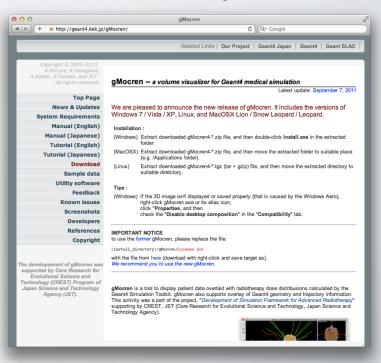
Geant4 Collaboration Meeting 19-23 Sept 2011 SLAC

gMocren - Akinori Kimura et al

- gMocren is a volume visualizer for Geant4-based radiotherapy simulation
- New gMocren has been released on September 7, 2011 at http://geant4.kek.jp/gMocren/.
 - Supporting platforms:
 - Windows 7 / Vista / XP (32bit build)
 - Linux built on SLC 4, 5 or 6 (32/64 bit build)
 - MacOSX Lion (64bit) / Snow Leopard (64bit) / Leopard (32bit)

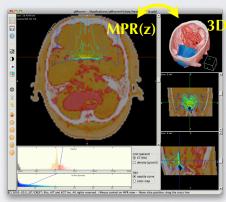
gMocren Web site



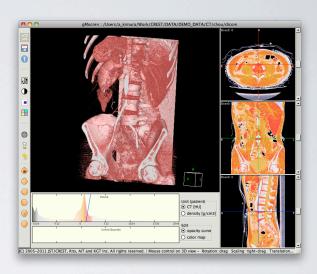


New Features and Plans

- New Features
 - MacOSX and 64 bit build of Linux versions have been added.
 - The 3D and MPR panes can be exchanged each other.
 - DICOM data can be handled.
 - GUI has been rearranged.

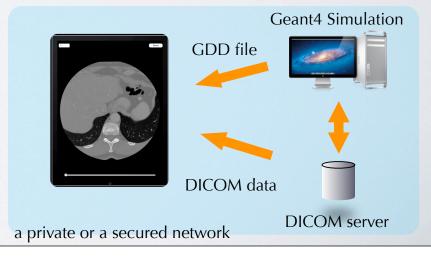


To enlarge a dose contour



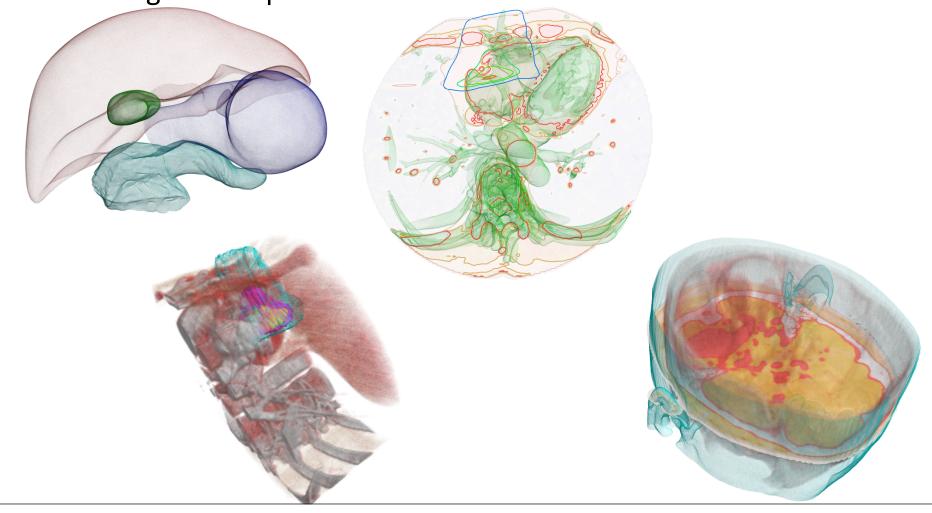
DICOM data set: 512*512*745 voxels

- Plans
 - The GDD (gMocren Dedecated Data) file format will be updated. (next year)
 - Data compression with the zlib in order to reduce the file size
 - More attributes of detectors for drawing detectors flexibly
 - gMocren-file driver and gMocren will be also updated.
 - iPad version (alpha release in next year?)



Fusion Images from Particle Based Rendering Kyoko Hasegawa et al

• We presented the particle based rendering that realizes precise rendering of transparent surfaces and fused visualization.



Qt Update - Laurent Garnier

- Qt3 Version has been removed
- Big improvement in batch mode, can run example without any window (but still do need a graphics card)
- Improvements in transparency
- Will soon add a volume tree viewer (as in HepRApp)
- Additional requirements collected:
 - center the view on picked volume
 - display volume name in the viewer

Work Session - Laurent Garnier and John Allison

- Investigating incorporating an OpenInventor window into QT
- Improvements in handling of transparent solids in Gl
- Improve rendering speed in GI issue with too many flushes
 - factor of 10 speedup